

Appl. No. 10/627,267  
Amdt. Dated April 4, 2005  
Reply to Office Action of December 2, 2004

**...REMARKS/ ARGUMENTS...**

The Official Action of December 2, 2004 has been thoroughly studied. Accordingly, the following remarks are believed to be sufficient to place the application into condition for allowance.

Claims 1-3 are pending in this application.

Claims 1-3 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over co-pending application serial no. 10/627,266.

Claims 1-3 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over co-pending application serial no. 10/627,267.

In response to the provisional obviousness-type double patenting rejections which were repeated from the Official Action mailed June 28, 2004, applicant filed a Terminal Disclaimer on January 17, 2004 in which the terminal part of any application issuing on the present application which would extend beyond the term of any patent issuing on co-pending application serial no. 10/627,266 or co-pending application serial no. 10/627,267 was disclaimed.

The undersigned has verified from the PTO's PAIR system that the Terminal Disclaimer was received by the Examiner.

It is submitted that the Terminal Disclaimer overcomes the obviousness-type double

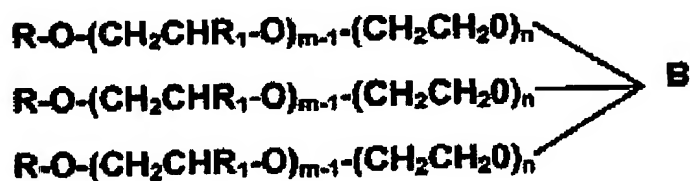
Appl. No. 10/627,267  
 Amdt. Dated April 4, 2005  
 Reply to Office Action of December 2, 2004

patenting rejections of the claims.

Claim 1 stand rejected under 35 U.S.C. §102(b) as being anticipated by or, in the alternative under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 3,316,287 or G.B. 1,090,565 both to Nunn, Jr. et al.

U.S. Patent No. 3,316,287 and G.B. 1,090,565 are essentially the same disclosures inasmuch as G.B. 1,090,565 is based upon U.S. Patent Application Serial No. 357,791 from which U.S. Patent No. 3,316,287 issued.

The Nunn, Jr. et al. references disclose organic polyalkyleneoxy borates that have the general formula:



Where R represents at least one member of the group consisting of either a straight of branched chain alkyl radical containing from 10 to 28 carbon atoms, R<sub>1</sub> represents either hydrogen, methyl, ethyl, phenyl or cyclohexane oxide, and m and n represent a positive integer of from 1 to 150.

Nunn, Jr. et al. teaches that the organic polyalkyleneoxy borates "range from viscous oils to waxy solids which are particularly adaptable as functional fluids such as, for example, hydraulic fluids, synthetic lubricants, etc., in water repellant formulations, in cosmetics, as mold-release agents and in other industrial applications."

Appl. No. 10/627,267  
Amdt. Dated April 4, 2005  
Reply to Office Action of December 2, 2004

In the paragraph bridging columns 5 and 6 Nunn, Jr. et al. teach that the organic polyalkyleneoxy borates:

...may be used in the formulation of functional fluids, paints, plastics, greases, lubricants and other petroleum products, catalysts, drugs, textile auxiliaries, and the like. In the formulation of functional fluids they may be used to modify lubricating, viscosity and other rheological properties. They may be used in hydraulic and refrigeration systems. Their mild nature makes them of value in applications such as cosmetics, detergents, polishes, fabric cleaners and other cleaning products for household and industrial uses. They also are applicable in non-aqueous media such as solvent base paints and other protective coatings and the like. They may be used in textile processing such as in fiber finishes, water repellants, antistatic agents, weighting textile goods, kier boiling, scouring, and other textile applications. Their esters may also be used to improve strength in cotton goods. They may also be used to modify the surface properties of leather, wood, paper and other related materials. Another use is as modifiers in protective coatings, such as paints and enamels. Still another use is in the preparation of catalyst carriers. They may also be used in the manufacture of polymers as intermediates such as cross-linking agents and to improve scratch resistance. They are also useful in biocidal formulations as emulsifiers, in industrial applications such as defoamers, corrosion inhibitors, refractory binders in investment casting, gelling agents, additives to improve adhesion of protective coatings as lacquers and resins to glass.

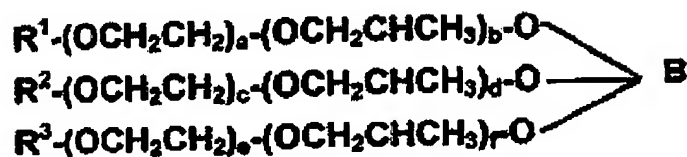
Clearly not all of the organic polyalkyleneoxy borates of Nunn, Jr. et al. function as mold-release agents.

In fact, Nunn, Jr. et al. fails to provide any specific example of a mold-release agent.

Moreover, Nunn, Jr. et al. teaches applications such as "additives to improve adhesion" would appear to teach away from the function of release agents.

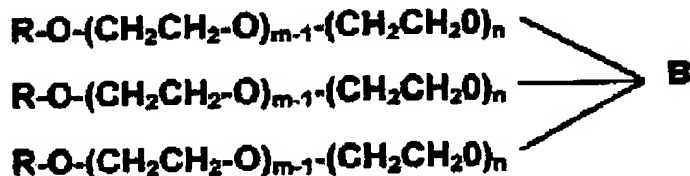
Applicant claims a release agent that has the general formula:

Appl. No. 10/627,267  
 Amdt. Dated April 4, 2005  
 Reply to Office Action of December 2, 2004

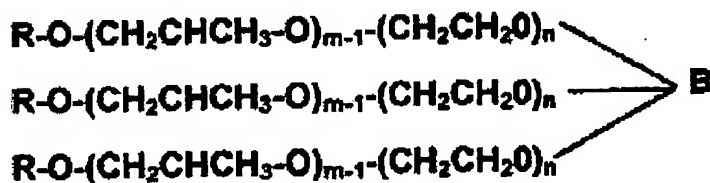


Where  $R^1$ ,  $R^2$  and  $R^3$  are independently selected from the group consisting of hydrogen and a hydrocarbon group, and wherein a, b, c, d, e and f, independently are integers from 0 to 30 with the proviso that the sum of  $a + b + c + d + e + f$  is from 6 to 80.

If  $R_1$  in Nunn, Jr. et al. were chosen to be hydrogen the resulting formulation would be:



If  $R_1$  in Nunn, Jr. et al. were chosen to be methyl the resulting formulation would be:



In the case of either substitution, Nunn, Jr. et al. teach that the  $CH_2CH_2O$  is attached to the boron atom.

Note in particular all the examples provided by Nunn, Jr. et al. require this particular

Appl. No. 10/627,267  
Amdt. Dated April 4, 2005  
Reply to Office Action of December 2, 2004

structural configuration, i.e. in which  $\text{CH}_2\text{CH}_2\text{O}$  is attached to the boron atom.

Moreover, Nunn, Jr. et al. allows m and n to be 1 to 150, whereas in applicant's formula the sum of  $a + b + c + d + e + f$  is from 6 to 80.

From the above the following conclusions can be made:

- 1) Nunn, Jr. et al. does not teach applicant's claimed formulation.
- 2) Nunn, Jr. et al. teaches a vast number of organic polyalkyleneoxy borates that have a multitude of completely diverse uses.

- 3) Nunn, Jr. et al. does not provide any specific examples of the organic polyalkyleneoxy borates being used or formulated for use as mold-release agents.

Nunn, Jr. et al. does not anticipate applicant's claimed invention at the very least because of structural differences.

On page 4 of the Official Action the Examiner states that:

Even if it turns out that the claimed invention is not anticipated by the disclosures of Nunn Jr. et al.'287 and Nunn Jr., et al.(GB'565), it would have been obvious to the skilled artisan to extrapolate, from the disclosures of Nunn, Jr. et al. '287 and Nunn, Jr., et al. (GB'565), the antistatic agent, as claimed, as per such having been within the purview of the general disclosures of Nunn, Jr. et al. '287 and Nunn, Jr., et al. (GB'565) and with a reasonable expectation of success.

First, as noted in applicant's previous response, the CCPA has held in *In re Petering*:

A prior art disclosure of a generic formula encompassing a vast number of compounds, including an applicants claimed compounds, does not by itself

Appl. No. 10/627,267  
Amdt. Dated April 4, 2005  
Reply to Office Action of December 2, 2004

describe applicants claimed invention within the meaning of 35 USC 102. Rather, such a prior art reference must further provide a more specific, limited teaching relating to the claimed compounds in order to anticipate the same. See *In re Petering*, 133 USPQ 275 (CCPA 1962); *In re Ruschig*, 145 USPQ 274 (CCPA 1965); *In re Arkley*, 172 USPQ 524

A fair reading of the Nunn, Jr., et al. references will reveal that Nunn, Jr., et al. is directed to a generic formula that not only encompasses a vast number of compounds, but in addition, Nunn, Jr. et al. teaches that their compounds provide a vast array of functions and uses as noted, for example, in the paragraph bridging columns 5 and 6 of the U.S. patent reference.

With regard to the Examiner's position that the teachings of Nunn, Jr. et al., could be extrapolated with "a reasonable expectation of success" applicant notes the holding in *In re Rinehart*:

The view that success would have been "inherent" cannot, in this case, substitute for a showing of reasonable expectation of success. Inherency and obviousness are entirely different concepts. *In re Rinehart*, 189 USPQ 143, 148 (CCPA 1976).

Nunn, Jr. et al. provides no guidance as to how the teachings can be extrapolated so as to achieve "a reasonable expectation of success."

Moreover, Nunn, Jr. et al. does not provide any guidance as to release agents other than the isolated mention of mold-release agents in column 1.

Certainly changing the structure of the formula taught by Nunn, Jr. et al. to obtain a structure similar to applicant's structure goes beyond the substitutions which are allowable by Nunn, Jr. et al.

Appl. No. 10/627,267  
Amdt. Dated April 4, 2005  
Reply to Office Action of December 2, 2004

Applicant's invention is directed to a formula that is not taught by Nunn, Jr., et al. and a class of compounds that provide a particular mold release function that has been shown to be significant as compared to conventional mold release agents.

It accordingly cannot be stated that Nunn, Jr., et al. anticipates or in any way suggests, i.e. leads or directs one to applicant's claimed invention.

Based upon the above, it is submitted that the Examiner cannot rely upon either of the references to Nunn, Jr. et al. under 35 U.S.C. §102 as anticipating applicant's claimed invention.

Moreover the Examiner cannot rely upon either of the references to Nunn, Jr. et al. under 35 U.S.C. §103 to establish a prima facie case of obviousness of applicant's claimed invention.

Accordingly, the outstanding rejections of the claims should properly be withdrawn and the application should proceed to allowance.

It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

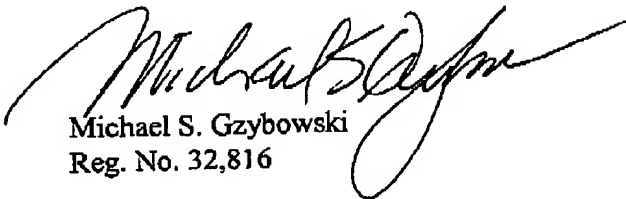
If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved; the Examiner is invited to contact applicants' patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension

Appl. No. 10/627,267  
Amdt. Dated April 4, 2005  
Reply to Office Action of December 2, 2004

of time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



Michael S. Gzybowski  
Reg. No. 32,816

BUTZEL LONG  
350 South Main Street  
Suite 300  
Ann Arbor, Michigan 48104  
(734) 995-3110

126155.1